PART 503 - SAFETY

SUBPART A – ENGINEERING ACTIVITIES AFFECTING UTILITIES

AL503.01(a) Scope

Representatives of public and private utility companies appreciate being notified of any proposed investigations and construction activities near their facilities. It is the Natural Resources Conservation Services' policy that the responsible NRCS employee see that all of the steps in this subpart are carried out.

The safety of public and private utilities is the responsibility of the district conservationist. However, on PL-566, RC&D, EWP, and other formal construction projects, the project or resource engineer will be the designated representative. It is state policy that subsurface exploration, design, and earthmoving operations will not be undertaken until the responsible NRCS employee, or his designated representative, has taken precautions to minimize damage to utilities and has specifically discussed these with the owner or sponsoring organizations.

AL503.02(d) General Considerations

During planning, work involving subsurface investigations or construction requires that all affected utilities be accurately located and recorded on the map used in the planning process. The map will be filed in the appropriate field office or design office. Affected utilities will also be shown on the soil and foundation investigation drawings and on the detailed construction drawings for use by soils investigation personnel and contractors respectively. Locations of utilities will be determined by a thorough field review; discussions with the landowner, operator, or sponsoring organization; or contact with the utility companies. During field inspections, particular attention should be given to utility markers set in fence lines, right-of-ways, or elsewhere.

AL503.04(a) Buried Utilities

Landowners or operators, sponsoring organization, and contractors are to be notified of their liability concerning damage to utilities or resulting damages created by such action. They are to be informed that the NRCS assumes no responsibility as to the existence or nonexistence of any utilities.

The responsible NRCS employee must be assured that the utility company has been notified of the place, time, and type of construction work prior to its performance. During subsurface investigation or construction work within the immediate area of the utility involved, the company should be invited to have a representative present on the site.

A list of utility companies that should be notified of any proposed investigations and construction activities in the vicinity of their facility is provided on the following page. They may be reached through the **Alabama Line Location Center at 1-800-292-8525**. The Alabama Line Location Center is an underground utility protection service designed to provide contact with 96 different organizations with a single phone call. By calling this number, any one of the companies listed can be notified of pending excavation. This free-of-charge service is available Monday through Friday from 7 a.m. to 5 p.m. with emergency service 24 hours a day, 7 days a week. However, it is requested that calls be placed 48 hours (2 working days) in advance of planned work to facilitate scheduling of line locating crews. All calls are recorded on tape and maintained as a protective record.

ALABAMA LINE LOCATION CENTER MEMBERSHIP LIST Go to this website for the current membership list.
www.al1call.com

PART 503 - SAFETY

SUBPART A – ENGINEERING ACTIVITIES AFFECTING UTILITIES

AL503.04(a)

SAMPLE OF INFORMATION THAT WILL BE ON TWO-PART POSTCARD

Inside Top Portion

Instruction

August 29, 1998

Dear Mr. Johnson:

Because of the great hazard of life and property from the disturbance of utilities by construction or foundation investigation equipment and because the conservation work to be done on land controlled by you is in the vicinity of Three Star Gas Company, transmission pipeline, before work proceeds, it is your responsibility to do the following:

1. Notify the utility company of the location and kind of work to be done and the proposed date that work will start.
   a. Subsurface investigation ---------- Sept. 17, 1998
   b. Construction ---------- Nov. 5, 1998

2. Request that utility owner assist in locating and staking the utility onsite. ------ By Sept. 10, 1998

3. Request that a utility company employee be present during construction within the utility right-of-way. ---------- Nov. 5, 1998

4. Notify contractor of location of utility. ---------- Nov. 5, 1998

5. Fill out and sign the attached postcard and return to the Natural Resources Conservation Service. ---------- Sept. 10, 1998

_____
District Conservationsit

Outside Bottom Portion

Landowner's Name: Arthut A. Johnson Address: Rt. 3, Handley, Va.

Utility Company: Three Star Gas Co. Address: 412 S. Ridge Road

Utility Representative Notified: Sam E. Moore, Division Manager
Name Title

Date Notified: Sept. 5, 1998

If utility notified by letter, date of acknowledgement of receipt: by telephone – confirmed by letter from Mr. Moore, Sept. 8, 1998.

Utility representative will locate and stake: yes (X) no ( )

Utility representative will be present during construction: yes (X) no ( )

Contractor notified: Leon Smith, Owner-operator Nov. 5, 1998
Name Title Date

_____ _____
Owner-Operator Signature Date

AL503-2(4)

AL503.55 NRCS/State Relationships

The state conservation engineer (SCE) is responsible for coordinating NRCS activities concerning dam safety. The SCE shall work with the State of Alabama and others in promoting the development of a strong state dam-safety program.

AL503.56 Responsibility for dams.

(a) NRCS in Alabama provides technical and/or financial assistance on dams, dikes, and other water control structures under various programs. Sudden failure of many of these may seriously endanger life and property. Adequate design, construction, and proper operation and maintenance can significantly reduce the likelihood of such failures. NRCS technical assistance in the design and construction of dams shall ensure that all NRCS standards are met and that the dam does not pose an unsafe condition to downstream landowners.

(b) The following procedures shall be followed for the design, construction, repair, or alteration of dams constructed under the conservation operations program.

(1) The district conservationist (DC) in consultation with the assistant state conservationist for field operations (ASTC-FO) and the resource engineer (RE) is responsible for determining if proper design and construction inspection assistance can be provided by someone with appropriate engineering job approval authority. If NRCS cannot provide the necessary technical assistance in a timely manner, the DC shall inform the landowner of his/her need to arrange for the services of a private engineer before proceeding with the project. Before NRCS provides technical assistance for the design of a dam, the DC is to inform the landowner of his/her responsibilities in constructing and operating the dam [AL-ENG-27 or AL-ENG-27a signed and on file (See AL501.04(a) – Exhibit 2)]. When the design and plans are complete, the landowner is responsible for obtaining any required permits to construct the dam (NPDES, 404, etc.). The DC should provide assistance to the landowner as needed in securing any permit, but shall not act as an agent for the landowner under any circumstances.

(2) Once NRCS undertakes the design of a dam or impoundment, the DC shall have a clear understanding with the landowner that any changes to the plans and specifications must be approved by NRCS. If for any reason the design is changed, or construction proceeds without NRCS's approval and appropriate corrections are not made, the DC shall immediately notify the landowner in writing of the deviations and state that NRCS is terminating all assistance on the project. A copy of this letter shall be sent to the ASTC-FO, RE, and SCE.

(3) When final designs are complete, the NRCS will provide sufficient copies of the plans (AL-ENG-2 or AL-ENG-3) and specifications to the cooperator for construction. The plans and specifications shall adequately describe the works of improvement and shall include the job class and hazard classification of the dam. As appropriate, the plans shall also include a description of downstream land use and potential damage that may result from a sudden dam failure, the results of any geologic investigation, cross-sections, profiles, logs of borings, locations of borrow areas, drawings of principal and emergency spillways, and other additional details to clearly indicate the extent of the work to be performed. A vegetation plan and an operation and maintenance plan shall be included as part of the final design.

(4) It is essential that NRCS provide adequate inspection during construction in order to certify that the dam was constructed in accordance with the plans and specifications.

AL503.56(b)(5)

(5) During the installation of the dam, construction checks shall be taken and recorded in the engineering field notes. Construction checks shall be of such frequency and amount that it can be determined if installation is in conformance with NRCS plans and specifications. As a minimum, the following items shall be checked during construction and properly recorded:

(i) Foundation preparation and cutoff trench.
(ii) Principal spillway installation including type of pipe and coating, pipe size and gauge, pipe invert elevations, etc.
(iii) Antiseep collar or drainage diaphragm.
(iv) Foundation drain installation, if required.
(v) Sufficient checks of earthfill placement and compaction to ensure adherence to plans and specifications.
(vi) Emergency spillway width, side slopes, control section, inlet and outlet grades.
(vii) Assurance that adequate vegetation will be established.

(6) Construction technical assistance provided to the landowner in the form of verbal instructions shall be documented.

(7) Any design changes made during construction must be approved by an NRCS employee with appropriate engineering job approval authority before changes are made.

(8) When the dam is completed, the responsible NRCS employee with the appropriate engineering job approval authority will properly document that the dam was completed according to plans and specifications and mark the plans “as-built”.

(9) Construction check notes, design data, and a copy of the “as-built” plans and specifications shall be retained in the field office as a permanent record as long as the dam remains in place.

(c) The following procedures shall be followed for the design, construction, repair, or alteration of the following type of measures (project or non-project type) that have agreements or easements providing for sponsor/NRCS inspection:

- All Class (a), (b), and (c) dams [National Engineering Manual (NEM) 520.20];
- Class I dikes (See NRCS Conservation Practice Standard for Dikes, Code 356); and
- Other measures whose sudden failure may endanger life or cause serious damage to property. These measures will include water control structures such as floodwater diversions, diversion dams, debris basins, irrigation canals, etc.

(1) Before recommending the commitment of federal construction assistance, the ASTC-FO is to ensure that the sponsors or owners are willing and able to perform operation and maintenance. The ASTC-FO will work with the SCE to see that O&M plans [See AL501.04(a) Exhibit 3] are prepared for all project and non-project activities as appropriate.

(2) An O&M plan will be developed for each structure and signed by all parties having O&M responsibility. The O&M plan will be prepared concurrently with the design of the specified structure. It will set forth the requirements for proper and safe O&M of the dam. The O&M plan will be explained to the sponsor or owner prior to furnishing construction layout assistance.

(3) The SCE is responsible for establishing the engineering requirement for O&M to be included in O&M plans and agreements. The SCE also determines need and specifications for non-vegetative O&M treatment.

(4) Design operating procedures are according to AL511.03(a).

(5) Inspections will be performed according to AL503.59.

AL503.59 Interim Assistance.

(a) Inspections.

(1) Regularly scheduled inspections of project type dams and other included measures [See AL503.56(c)] are necessary to insure that proper O&M is being performed. These inspections should include: (1) reviewing hazard classifications, (2) assessing the adequacy of current O&M activities, (3) identifying unsafe conditions, (4) specifying means of relieving unsafe conditions, (5) notifying those who are responsible, and (6) encourage prompt corrective action if necessary.

(2) Natural Resources Conservation Service assistance will not compete with state inspection programs. If satisfactory inspections are made by a state agency in compliance with state law, NRCS will not conduct separate inspections. However, if requested, NRCS may participate in state-administered inspections.

(3) In the absence of acceptable state inspections and where O&M agreements or easements allow, NRCS will inspect project and non-project dams. Engineering inspections required by NRCS are to be conducted jointly by NRCS, the sponsors or owners, representatives of the Soil and Water Conservation Districts (SWCD), and representatives of the U.S. Forest Service when the dam is on Forest Service property.

(4) Engineering inspections will be made on all Class (a), (b), and (c) dams and on all Class I dikes. The NRCS resource engineers will be responsible for conducting the engineering inspections within their assigned counties during:

- the initial filling;
- annually during the first 3 years;
- after major storms or other events (earthquakes); and
- once every 5 years.

The NRCS will not require independent NRCS engineering inspections of structures of the type covered by this policy which have no agreement or easement authorizing such inspections. However, upon request of the sponsor or owner, NRCS may assist in making such inspections.

(5) Resource engineers are responsible for performing (or approving) the 5-year engineering inspections in their assigned counties. Engineers performing the 5-year inspection of dams should be experienced in planning, designing, constructing, and inspecting of dams for O&M. Engineers meeting these requirements will also be used, when available, on all engineering and O&M inspections.

(6) Alabama NRCS Dam Safety 5-year Inspection Plan [See AL503.59(b) Exhibit 1] sets up the schedule for project activity dams. This will be maintained as a master schedule in each team, resource engineer's office, and field office so that inspections can be accomplished on a timely basis. Five-year engineering inspections for non-project dams will be added to the schedule and will be performed when requested by the owner or as required under new construction.

(b) Inspection Reports.

(1) Engineering inspection reports will be prepared for each dam listed in the 5-year inspection schedule (See AL503.59(b) Exhibit 1 – Alabama NRCS Dams Safety 5-year Inspection Schedule). The NRCS inspecting engineer will record their findings on one or both of the following forms, as appropriate:

AL503.59(b)(1)(i)

(i) Form AL-ENG-23, Dam Classification or Reclassification for Alabama [See AL503.59(b) Exhibit 2]. This form will be completed initially during planning and prior to design of future non-project and project dams in Classes (a), (b), and (c) (See NEM 520.23 and AL520.23). The form will also be completed after any inspection which reveals that a change in hazard classification is warranted. If the classification of a dam changes, the inspecting engineer is to notify the SCE who will complete action to determine new spillway dimensions, storage requirements, and top of dam elevation. Each completed AL-ENG-23 will be reviewed and approved by the SCE and others as required by NEM prior to distribution. The SCE will distribute a copy of the original (including reclassification) to the appropriate resource engineer's office, team office, and field offices for filing, and to the Design Section for the project site design folder. The original will be filed in the SCE's office.

(ii) Form AL-ENG-24, Watershed Structure Inspection Report, [See AL503.59(b) Exhibit 3]. This form shall be completed by the responsible engineer in the field for annual inspections during the first 3 years after construction of a watershed dam is completed, inspections after a major storm event that produces spillway flow, and for routine 5-year inspections. These engineering inspections will include engineering surveys as determined by the responsible engineer to document changes or potential problems with the safety of class "a" and "b" structures. The engineering inspections for class "c" structures will include as a minimum:

- A plotted survey of the centerline profile of the embankment and identifying the designed (settled) top-of-dam elevation,
- at least two plotted cross-sections of the embankment (one of which should be at the principal spillway location),
- a plotted cross section at the emergency spillway control section,
- a recorded elevation on the outlet invert of the pipe or lip of the impact basin,
- and any other safety related surveys as determined by the responsible engineer.

The 5-year inspections will also include documentary digital photographs of potential safety concerns only. When explanation is needed to identify or describe the safety concern, notes shall be added to the digital photograph utilizing software such as Microsoft PowerPoint. Photographs are to be saved as ".jpg" files and given a file name as follows:

Watershed Name, Site Number, Month & Year, Picture Number.jpg

For example: Dry Ck 7 2-04 A.jpg

Photographs will be transmitted to the engineering section secretary for placement in the Dam Safety files.

The final AL-ENG-24 report for engineering inspections will be approved by the SCE and distributed within 30 days to the field office, sponsors or owners, and the responsible engineer. The original 5-year inspection form along with documentary digital photographs and plotted surveys will be filed in the official dam safety file in the SCE's office. Reports on dams found to be unsafe will be distributed as shown above and the actions required by paragraph AL503.59(c) will be followed.

(c) Inspection Follow-up. The district conservationist (DC) will work with the sponsor(s) or owner(s) to make corrections on safe and unsafe dams where needs have been identified. When accomplished, the DC will itemize the corrections performed and submit a copy of his written report to the ASTC-FO, SCE, and each sponsor or owner. In addition, the ASTC-FO will advise the SCE of actions being taken to resolve any remaining O&M problems. All follow-up reports will be filed with the initial inspection report. All needed corrections should be complete within 30 days after reviewing with the sponsor(s) or owner(s).

(d) Records. The ASTC-FO will maintain applicable O&M folders and a copy of the original of the AL-ENG-24 annual O&M inspection and 5-year engineering inspection reports for dams located in counties on their team. These folders will include the plan of operation, annual O&M inspection reports, 5-year inspection reports, and follow-up action that was performed. The SCE will maintain the original of the reports along with documentary photographs and surveys and any other applicable material in the dam safety file.

Inspection reports [AL-ENG-23 and AL-ENG-24 (annual O&M and 5-year)] will be distributed as follows:

Original: State Conservation Engineer (include documentary photographs and surveys)
Copies: Sponsor(s) or owner(s)
District Conservationist
Responsible Resource Engineer
ASTC-FO Team Office
WSI Coordinator at the Coosa Valley RC&D Office (state-wide responsibility)

AL503-12(2)

(e) Unsafe Dams.

(1) If a dam is determined to be unsafe based on visual inspections, the engineer performing the engineering inspection will complete action to verify the condition of the dam. An outline of actions to be taken will be developed in consultation with the SCE and state design engineer. The outline will be developed using the Phase II Investigation in the Corps of Engineers Recommended Guidelines for Safety Inspection of Dams or current NRCS policy and procedures.

(2) NRCS will encourage the sponsor(s), owner(s), or other appropriate entity to correct the condition as quickly as possible. The steps to be taken in these circumstances are as follows:

(i) The ASTC-FO will provide the sponsor or owner with a copy of the report [(See AL503.59(b)] and written notification of the unsafe condition and the actions needed to correct it. A copy of the report will be given to the appropriate state or county authority. NRCS will encourage compliance with the needed actions.

(ii) If the necessary corrective actions are not taken within 30 days after the date of notification of the sponsor or owner, the ASTC-FO will notify authorities having jurisdiction over the structure.

(f) Schedules.

The engineering inspection and 5-year engineering inspection of dams should be coordinated with the sponsors O&M inspection and be performed in May or June as required by AL503.59(a).

ALABAMA NRCS DAM SAFETY
5-YEAR INSPECTION SCHEDULE

JEFF ALLRED

WATERSHED	STRUCTURE NUMBER	INSPECTION SCHEDULE/ CURRENT HAZARD CLASSIFICATION					COUNTY	COMPLETION DATE
		2004	2005	2006	2007	2008		
Big Nance Creek	4	a					Lawrence	08/11/87
Cypress Creek	17	b					Lauderdale	05/14/86
Hurricane Creek	11	**c**					Madison	09/14/64
Little New River	1				a		Marion	10/19/60
Little New River	2				a		Marion	10/19/60
Little New River	3				a		Marion	10/19/60
Town Creek	3					a	Lawrence	05/27/70
Town Creek	11	a					Franklin	12/30/86
Town Creek	12					a	Lawrence	12/20/69
Town Creek	16					a	Lawrence	12/30/68
Town Creek	22					a	Lawrence	12/30/68

TIM WILLIAMS

WATERSHED	STRUCTURE NUMBER	INSPECTION SCHEDULE/ CURRENT HAZARD CLASSIFICATION					COUNTY	COMPLETION DATE
		2004	2005	2006	2007	2008		
Bristow Creek	1		a				Etowah	05/23/63
Little Paint Creek	9	b					Marshall	06/26/62
Terrapin Creek	6				b		Cherokee	07/09/63
Terrapin Creek	8				a		Cherokee	03/07/68
Terrapin Creek	17				a		Cherokee	09/29/62

JEFF HOLLOWAY

WATERSHED	STRUCTURE NUMBER	INSPECTION SCHEDULE/ CURRENT HAZARD CLASSIFICATION					COUNTY	COMPLETION DATE
		2004	2005	2006	2007	2008		
Blue Eye Creek	1					b	Talladega	08/12/69
Blue Eye Creek	2					**c**	Talladega	09/30/68
Cahulga Creek	1	**c**					Cleburne	12/30/71
Cheaha Creek	2						Talladega	04/20/66
Cheaha Creek	3			**c**			Talladega	04/20/66
Cheaha Creek	4			b			Talladega	08/09/67
Cheaha Creek	5	b		b			Talladega	09/30/68
Cheaha Creek	6	b					Talladega	07/17/70
Choccolocco Creek	2						Calhoun	06/27/69
Choccolocco Creek	3					b	Calhoun	06/27/69
Choccolocco Creek	6		**c**				Calhoun	04/14/77
Choccolocco Creek	7	**c**					Cleburne	09/03/70
Choccolocco Creek	9	a					Calhoun	06/20/73
Choccolocco Creek	11	**c**					Calhoun	04/21/71
Choccolocco Creek	14					a	Talladega	07/11/69
Choccolocco Creek	15					a	Talladega	07/11/69
Choccolocco Creek	17					a	Talladega	07/11/69
Choccolocco Creek	24	**c**					Cleburne	09/13/72
Crooked Creek	2	b					Clay	09/26/70
Crooked Creek	3	b					Clay	09/16/70
Crooked Creek	5	b					Clay	12/01/76
Crooked Creek	16				**c**		Clay	08/22/68
Crooked Creek	17A				b		Clay	04/05/85

JEFF HOLLOWAY (con't)

WATERSHED	STRUCTURE NUMBER	INSPECTION SCHEDULE/ CURRENT HAZARD CLASSIFICATION					COUNTY	COMPLETION DATE
		2004	2005	2006	2007	2008		
Dynne Creek	1			b			Cleburne	06/04/86
Dynne Creek	3			b			Cleburne	09/24/87
Fox Creek	2				a		Clay	07/27/67
High Pine Creek	1			a			Randolph	12/27/65
High Pine Creek	2			b			Randolph	12/27/65
High Pine Creek	3			a			Randolph	08/06/65
High Pine Creek	4		a				Randolph	03/16/61
High Pine Creek	5		a				Randolph	03/16/61
High Pine Creek	6		b				Randolph	03/16/61
High Pine Creek	10		a				Randolph	05/20/62
High Pine Creek	11		a				Chambers	05/20/62
High Pine Creek	12		a				Chambers	05/20/62
Ketchepedrekee Creek	1				b		Clay	04/12/67
Ketchepedrekee Creek	9				b		Clay	04/01/74
Ketchepedrekee Creek	10				b		Clay	06/04/68
Ketchepedrekee Creek	11				b		Clay	09/19/68
Ketchepedrekee Creek	15		b				Clay	09/15/78
Little Hillabee Creek	1					a	Clay	05/15/69
Little Hillabee Creek	2					a	Clay	05/15/69
Little Hillabee Creek	3					a	Clay	05/27/70
Little Hillabee Creek	4					a	Clay	09/09/70
Little Hillabee Creek	6					a	Clay	09/09/70
Lost Creek	1		a				Cleburne	01/21/66
Lost Creek	2		a				Cleburne	01/21/66
Lost Creek	3		a				Cleburne	03/12/64
Lost Creek	4		a				Cleburne	01/21/66
Tallaseehatchie Creek	1		**c**				Talladega	07/18/80
Tallaseehatchie Creek	2		**c**				Talladega	06/23/75
Tallaseehatchie Creek	3		**c**				Talladega	06/23/75
Tallaseehatchie Creek	4		**c**				Talladega	06/15/82
Tallaseehatchie Creek	6		b				Talladega	05/26/76
Tallaseehatchie Creek	7		b				Talladega	07/17/73
Tallaseehatchie Creek	9		b				Talladega	02/14/91
Terrapin Creek	9			b			Calhoun	11/13/64
Terrapin Creek	14			**c**			Cleburne	11/13/64
Terrapin Creek	15			b			Cleburne	11/13/64
Terrapin Creek	21			a			Cleburne	10/05/66
Terrapin Creek	22			a			Cleburne	07/27/68
Terrapin Creek	31			**c**			Cleburne	11/29/72
Terrapin Creek	33			b			Cleburne	06/27/69

RANDY MARTIN

WATERSHED	STRUCTURE NUMBER	INSPECTION SCHEDULE/ CURRENT HAZARD CLASSIFICATION					COUNTY	COMPLETION DATE
		2004	2005	2006	2007	2008		
Old Town Creek	22		a				Bullock	11/25/75
Old Town Creek	24		a				Bullock	11/15/73
Old Town Creek	25		a				Bullock	11/23/73
Old Town Creek	26		a				Bullock	11/23/73
Old Town Creek	28		a				Bullock	11/29/75
Old Town Creek	29		a				Bullock	11/29/75

RANDALL EAST

WATERSHED	STRUCTURE NUMBER	INSPECTION SCHEDULE/ CURRENT HAZARD CLASSIFICATION					COUNTY	COMPLETION DATE
		2004	2005	2006	2007	2008		
Dry Creek	1					a	Marengo	12/11/93
Dry Creek	3					a	Marengo	08/22/98
Dry Creek	5					a	Marengo	10/07/92
Dry Creek	72			a			Marengo	8/24/01
Dry Creek	73					a	Marengo	08/22/98
Dry Creek	83					a	Marengo	12/11/93
Mush Creek	2	a					Dallas	11/21/78
Mush Creek	5	b					Lowndes	07/03/84
Powell Creek	1			a			Marengo	11/14/86
Powell Creek	3			a			Marengo	12/21/84
Powell Creek	4A			a			Marengo	08/14/90
Powell Creek	5				a		Marengo	05/08/86
Powell Creek	7				a		Marengo	01/10/63
Powell Creek	8				a		Marengo	01/10/63
Powell Creek	9				a		Marengo	01/10/63
Powell Creek	23		a				Marengo	05/25/95
Powell Creek	24		a				Marengo	05/25/95

LARRY McCRAY

WATERSHED	STRUCTURE NUMBER	INSPECTION SCHEDULE/ CURRENT HAZARD CLASSIFICATION					COUNTY	COMPLETION DATE
		2004	2005	2006	2007	2008		
Big Prairie Creek - French Crk.	11			a			Perry	03/11/65
Big Prairie Creek - French Crk.	12			a			Perry	09/24/64
Factory Creek	6				b		Sumter	10/15/91
Factory Creek	7				b		Sumter	06/29/84
Lake L.U. Dam	L.U.					**c**	Sumter	05/09/77

DAM CLASSIFICATION OR RECLASSIFICATION FOR ALABAMA

WATERSHED_____ **SITE NO.**_____ **COUNTY** _____ **JOB CLASS**_____

SITE STATUS AND HAZARD CLASS: Planning_____ Design_____

Date Dam Completed: _____ Current Hazard Class_____

Classified by_____ Title_____ Date_____

(Engineer having design approval authority for job class) _____

Drainage Area_____ sq.mi. Seismic Zone_____ Approx. Dam Height_____ft.

General Setting of Location_____

Purpose of Storage_____ Total Storage_____ ac.ft.

Flood Storage_____ac.ft. Other Storage_____ ac.ft.

Single Site_____ Upper in series_____ Lower in series_____ Intermediate in series_____

Cover Type in Drainage Area_____

Basic Geological Data_____

Configuration of Valley (Attach a flood plain map) _____

Degree of Expected Maintenance is_____

Specific Safety Laws and/or Needs_____

DESCRIBE EXISTING CONDITIONS DOWNSTREAM AND POTENTIAL FOR FUTURE DEVELOPMENT

(Potential loss to human life and/or property damage)

Agricultural Land_____

Industrial and Commercial Land_____

Roads and Highways_____

Railroads_____

Farm Buildings_____

Commercial Buildings_____

Homes_____

Public Utilities_____

Lakes, Ponds, Lagoons_____

Potential for Development_____

Other_____

Relative Risk Assessment $Rr = O_t + S_t =$ _____ + _____ = _____

Overtopping Failure Score $(O_t) = 0_1 \times 0_2 \times 0_3 =$ _____ X _____ X _____ = _____

Structure Failure Score $S_t = S_1 \times S_2 \times S_3 =$ _____ X _____ X _____ = _____

Was a breach study made:_____ If so, attach the inundation map.

CONCUR: STATE CONSERVATION ENGINEER _____ DATE_____
(All Jobs)

SOIL-COVER COMPLEX FOR STRUCTURES

SITE __________

________________________________WATERSHED

1. Drainage Area = ______________________ sq.mi. = _____________________ acres

2. L = Length of watercourse = ___________________________ feet

3. T_c = Time of concentration = $\frac{L}{3600\,v}$ = $\frac{\_\_\_\_\_\_\_\_}{3600 \times \_\_\_\_\_}$ = _____________ hours

= $\frac{L}{3600}$ = $\frac{\_\_\_\_\_\_\_\_}{3600 \times \_\_\_\_\_}$ = _____________ hours

Time of Concentration = _____________ hours

4. DETERMINATION OF RUNOFF CURVE NUMBERS FOR SOIL CONDITION II

Land Use or Cover	Treatment or Practice	Hydrologic Condition	Soil Group	Area: Acres	Area: Per cent	Curve Number	Weighted Curve Number
			TOTAL				

Prepared by ____________________________ Date ___________________________

Title __________________________________

AL503-12(10)

U.S. DEPARTMENT OF AGRICULTURE
Natural Resources Conservation Service

AL-ENG-24
January 2004

WATERSHED STRUCTURE INSPECTION REPORT

Date of Inspection: _____ 5 Year (____) ANNUAL (____)

County: _____ Watershed: _____ Site _____

Field Office: _____ Sponsor Responsible for O&M _____

Location: Latitude _____N Longitude _____W

Hazard Classification: _____
(Most recent AL-ENG-23)

"YES" responses need explanation added to "Remarks" section. (i.e.: What? Where? Extent?)
"NO" responses indicate problems not observed during inspection.
Non-applicable items should be noted by NA.

ITEM	YES	NO	REMARKS
1. General Conditions			
a. Alterations to dam?			
b. Development in downstream floodplain?			
c. Development around reservoir?			
2. Embankment			
a. Is vegetative cover inadequate?			
b. Are trees growing on either slope?			
c. Is brush/weed control needed?			
d. Are trees growing at waterline?			
e. Is drift debris present?			
f. Are cracks, settlement, or bulges present?			
g. Is seepage visible on downstream slope?			
h. Are animal burrows present?			
i. Are trails present?			
3. Front Slope Protection			
a. Any wave damage observed?			
b. Is riprap inadequate?			
c. Are rodent holes present?			
4. Inlet Structure and Gate Valves			
a. Does concrete exhibit deterioration?			
b. Is concrete reinforcement exposed?			
c. Was leakage observed inside inlet?			
d. Any corrosion of metal appurtenances?			
e. Is debris guard obstructed?			
f. Is debris guard corroded?			
g. Is gate stem broken or bent?			
h. Are components missing?			
i. Was gate determined not operational?			Date gate last operated:
j. Has inlet been modified to alter water surface?			
k. Is there structural movement?			
l. Is access door missing?			
m. Is wildlife gate/cool water release non-functional?			
5. Principal Spillway Conduit			
a. Is concrete conduit deteriorated?			
b. Is metal conduit corroded?			
c. Was leakage observed at pipe joints?			
d. Was pipe inspected internally?			

ITEM	YES	NO	REMARKS
6. Auxiliary Spillway			
a. Is vegetative cover inadequate?			
b. Any animal trails observed?			
c. Any vehicular trails observed?			
d. Is flow area obstructed?			
e. Is control section disturbed?			
7. Principal Spillway Release Channel			
a. Does scour hole appear unstable?			
b. Any boils observed?			
c. Is riprap inadequate?			
d. Any seepage observed?			
e. Is conduit outlet submerged?			
f. Is conduit outlet not properly supported?			
g. Is outlet channel obstructed?			
h. Is outlet channel degrading?			
i. Is foundation drain submerged?			
j. Is foundation drain rodent barrier missing?			
k. Is foundation drain not functional?			
8. Perimeter Fence			
a. Is fence inadequate?			
b. Are gates open?			
9. Reservoir Area			
a. Is pool at different level than designed?			
b. Does pool area have downed trees/debris?			
c. Is sediment deposition excessive?			

ACTIONS TAKEN: Identify all work performed in the preceding 12 months by sponsors and/or NRCS, including approximate cost and date completed.

ACTIONS NEEDED: Identify items by priority: low (next 12 months); high (as soon as possible). Indicate date assistance requested; technical or financial.

ADDITIONAL COMMENTS:

Sponsor Representative	**NRCS Representative**
State Conservations Engineer (Required for 5-Yr. Inspection)	

DISTRIBUTION: Original - State Conservation Engineer (with documentary photos and surveys)
Copies - Sponsor or Owner, Field Office, Responsible Resource Engineer, ASTC-FO Team Office, and Watershed Structure Improvement (WSI) Coordinator (Coosa Valley RC&D)